

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A00005LA
Revision 1
Eagle Aircraft
Eagle 150B

July 20, 1999

TYPE CERTIFICATE DATA SHEET NO. A00005LA

This data sheet which is part of the Type Certificate No. A00005LA lists the conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Eagle Aircraft (Malaysia) Sdn. Bhd.: trading as
Eagle Aircraft Pty. Ltd.
Lot 700 Cockburn Road
Henderson WA 6166
Australia

I. Model 150B (VLA - Special Class Category), Approved February 11, 1999

Engine Continental IO-240-B (one engine).
Type Certificate No. E7SO.

Fuel 100LL minimum grade aviation gasoline.

Engine Limits 2800 rpm for all operations (125 hp).

Propeller and
Propeller Limits McCauley 1A135BRM7057 fixed pitch propeller.
Type Certificate No. P-842.

Diameter : Max. 70.0 inches (1778 mm).
Min. 69.0 inches (1753 mm).

No further reduction permitted.

Static rpm at permissible throttle setting, not over 2300, not under 2200. No additional tolerance permitted.

Avoid continuous operation while descending between 2150 and 2350 rpm with power retarded below 1/4 throttle.

OR

McCauley 1A135CRM7057 fixed pitch propeller.
Type Certificate No. P-842.

Diameter : Max. 70.0 inches (1778 mm).
Min. 69.0 inches (1753 mm).

No further reduction permitted.

Static rpm at permissible throttle setting, not over 2300, not under 2200. No additional tolerance permitted.

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Avoid continuous operation while descending between 2050 and 2450 rpm with power retarded below 1/4 throttle.

Airspeed Limits (knots)

		IAS	CAS
Never Exceed	V_{ne}	167 (192 mph)	165 (190 mph)
Max. Structural Cruise	V_{no}	129 (149 mph)	130 (150 mph)
Max. Maneuvering	V_a	106 (122 mph)	107 (123 mph)
Max. Flaps Take-Off	V_{fe}	104 (120 mph)	100 (115 mph)
Max. Flaps Extended Full	V_{fe}	89 (102 mph)	85 (98 mph)

Center of Gravity (C.G.) Range

Forward Limit 70.0 inches (1778 mm) aft of datum at 1300 lbs. (590 kg) or less.
73.0 inches (1854 mm) aft of datum at 1411 lbs. (640 kg).
Variation is linear between 1300 lbs. (590 kg) and 1411 lbs. (640 kg).
Aft Limit 75.0 inches (1905 mm) aft of datum at all weights.

Empty Weight C.G. Range

None.

Datum

31.0 inches (787 mm) forward of the canard leading edge.

Leveling Means

Horizontal portion of the left hand side longeron/canopy rail.

Maximum Weight

Takeoff 1411 lbs. (640 kg)
Landing 1411 lbs. (640 kg)

Minimum Crew

1 pilot at 80.8 inches (2052 mm) aft of datum.

No. of Seats

2 at 80.8 inches (2052 mm) aft of datum.

Maximum Baggage

Hat shelf 19 lbs. (9 kg) at 114.3 inches (2800 mm) aft of datum.
Baggage bins 80 lbs. (36 kg) [40 lbs. (18 kg) each] at 114.2 inches (2900 mm) aft of datum.

Fuel Capacity

26.9 US Gallons (102 litres) total at 111.5 inches (2832 mm).
25.6 US Gallons (97 litres) usable at 111.5 inches (2832 mm).
See note 1 for data on weight and balance.

Oil Capacity

6 US quarts (5.7 litres) at 27.1 inches (688 mm)
(3 US quarts (2.8 liters) usable)
See note 1 for data on weight and balance.

Maximum Operation Altitude

13,100 ft.

Control Surface Movements

Aileron	Up	$25^\circ \pm 1^\circ$
	Down	$20^\circ \pm 1^\circ$
	Neutral	1° down $\pm 0.5^\circ$
Elevator	Up	$25^\circ \pm 0.5^\circ$
	Down	$24^\circ \pm 1^\circ$
Elevator Tab	Up	$20^\circ \pm 1^\circ$
	Down	$25^\circ \pm 1^\circ$
Rudder	Left & Right	$23^\circ \pm 1^\circ$

Rudder Tab (anti-balance)	Left	$13^{\circ} \pm 1^{\circ}$
	Right	$17^{\circ} \pm 1^{\circ}$
Canard Flaps	Up	$0^{\circ} \pm 0.5^{\circ}$
	Takeoff	$20^{\circ} \pm 0.5^{\circ}$
	Landing	$35^{\circ} + 1^{\circ}, -0^{\circ}$
Wing Flaps	Up	$-3^{\circ} \pm 0.5^{\circ}$
	Takeoff	$20^{\circ} \pm 0.5^{\circ}$
	Landing	$38^{\circ} + 1^{\circ}, -0^{\circ}$

Serial Numbers Eligible	Eagle 150B serial numbers 016 and subsequent.
Import Requirements	<p>A United States Standard Airworthiness Certificate may be issued in the "VLA - Special Class" category on the basis of an Australian Export Certificate of Airworthiness signed by a representative of the Civil Aviation Safety Authority (CASA) containing the following statement : "The aircraft covered by this certificate has been examined, tested and found to comply with the Master Documentation List Eagle 150B Issue 5 dated September 25, 1998 or later CASA approved revisions approved under US Type Certificate No. A00005LA and to be in a condition for safe operation".</p> <p>The US airworthiness certification basis for this aircraft type certificated under 14 CFR part 21, § 21.29 and exported by the country of manufacture is § 21.183(c).</p>
Certification Basis	<p>14 CFR part 21, § 21.17(b) using Joint Aviation Requirements - Very Light Aeroplanes (JAR-VLA) at Amendment 0 dated 26 April 1990, through Amendment VLA/92/1; § 21.29; and 14 CFR part 36 through amendment 36-21 effective December 28, 1995.</p> <p>Noise Control Act of 1972.</p> <p>Eligible for day-VFR operations and normal category maneuvers only.</p>
Production Basis	See Import Requirements.
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the approved Flight Manual, document FM150 (USA), amendment 0 dated 11 February, 1999 or later approved revision, must be carried.</p> <p>The list of basic required equipment for day-VFR operation is contained in the Approved Flight Manual.</p> <p>Installation of the following Service Bulletins is required for US operations:</p> <p>Service Bulletin 1048 – Anti-collision Light</p> <p>Service Bulletin 1049 – Imperial Units Placards</p> <p>Service Bulletin 1050 – Northern Hemisphere Compass</p> <p>Service Bulletin 1051 – US Gallons Fuel Gauge</p> <p>Service Bulletin 1052 - External Aircraft ID Plate</p> <p>Service Bulletin 1058 - Optional Replacement of Cabin Air Vent (for aircraft serial numbers 016 - 018 only)</p>
Service Information and Manual Approvals	Service bulletins, aircraft flight manuals, and overhaul and maintenance manuals, which are approved by the CASA Australia, are accepted by the FAA and are considered FAA approved. (These approvals pertain to the type design only).

NOTES:

- Note 1 A current weight and balance report, including a list of equipment included in the certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification. The Certificated Empty Weight and the corresponding Center of Gravity location must include full oil (11.1 lbs. at 27.1 inches) and unusable fuel (7.9 lbs. at 111.5 inches).
- Note 2 The placards specified in the Approved Flight Manual must be displayed at the appropriate locations.
- Note 3 Information pertaining to service life limited parts is contained in the EAGLE 150B Service Manual, Section 4, 'Airworthiness Limitations'. The safe life limit for the airframe is 10,000 flight hours.
- Note 4 All external portions of the airplane structure exposed to sunlight must be painted predominately white except for areas of markings and warning marks. The paint and primer must conform to the approved specifications listed in the Eagle 150B Service Manual, Section 4, 'Airworthiness Limitations'.

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